

Amendments to the Claims:

The following listing of claims replaces all prior versions and listings of claims in the application.

1. (Currently amended) : A synthetic silica glass for use with light having a wavelength of 150 to ~~[[200]]~~ 190 nm, which has an OH group at a concentration of less than 1 ppm, an oxygen-excess type defect at a concentration of 1×10^{16} defects/cm³ or less, a hydrogen molecule at a concentration of less than 1×10^{17} molecules/cm³, and a non-bridging oxygen radical at a concentration of 1×10^{16} radicals/cm³ or less in the state after the synthetic silica glass is irradiated with light of a xenon excimer lamp having an energy density of 10 mW/cm² and 3 kJ/cm².

2. (Currently amended): A synthetic silica glass for use with light having a wavelength of 150 to ~~[[200]]~~ 190 nm, which has an OH group at a concentration of less than 1 ppm, an oxygen-excess type defect at a concentration of 1×10^{16} defects/cm³ or less, a hydrogen molecule at a concentration of less than 1×10^{17} molecules/cm³, and a non-bridging oxygen radical at a concentration of 1×10^{16} radicals/cm³ or less in the state after the synthetic silica glass is irradiated with light of an F₂ laser by 10^7 pulses at an energy density of 10 mJ/cm²/pulse.

3. (Original): The synthetic silica glass as defined in claim 1 or 2, which has an oxygen-deficit type defect at a concentration of 1×10^{14} defects/cm³ or less.